

## Product datasheet for **RC209168**

### **PGM2L1 (NM\_173582) Human Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	PGM2L1 (NM_173582) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	PGM2L1
Synonyms:	BM32A; PMMLP
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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**ORF Nucleotide Sequence:**

>RC209168 ORF sequence  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

ATGGCTGAAAACACAGAGGGGATCTGAACTCCAACCTGCCCCACGCCCCCTACCACACCGGGGACCTC  
 AGCTGGACACGGCCATCGGGCAGTGGCTCCGCTGGGATAAGAATCCCAAAACAAAAGAGCAGATTGAAAA  
 CCTGTTACGGAATGGGATGAACAAGGAGCTGCGAGATCGTCTTTGTTGCCGAATGACTTTTGGGACTGCA  
 GGACTTCGTTCTGCCATGGGGCAGGGTTTTGCTATATTAATGACCTTACAGTAATACAGTCAACACAGG  
 GGATGTACAAATACCTTGAGAGATGTTTCTCAGACTTCAAGCAGAGAGGCTTTGTGGTTGGGATGACAC  
 TCGGGTCAAGTAACTAGCAGCTGCAGCAGCCAGAGGCTTGCTAACTACTGCTGCAGTCTTGCTGGCC  
 AAAGATGTTCTGTACCTTTTTCAAGATATGTTCTACACCTTTGTACCATATGCAGTTCAGAAGC  
 TCAAAGCAGTTGCAGGTGTGATGATTACTGCCTCTACAACCGCAAGGAAGACAATGGATACAAGGTTTA  
 CTGGGAACTGGTCTCAGATCACATCTCTCATGATAAAGAAATCTAAAATGTATAGAAGAATGTGTG  
 GAACCCTGGAATGGTTCCTGGAATGATAATTTAGTGGATACCAGCCCGCTGAAGAGAGACCTCTGCAGG  
 ACATTTGCAGGAGATACATGGAAGATCTGAAAAAGATCTGTTTTTACAGGGAGTTAAACTCGAAGACCAC  
 CTTGAAATTTGTGCACACATCTTTTCATGGGGTCCGACATGACTATGTGCAGTTGGCTTTTAAAGTGTTT  
 GGTTTTAAAGCCTCCAATTCAGTACCAGAACAAAAAGATCCTGATCCAGACTTTTCTACCGTAAATGTC  
 CAAATCCTGAAGAAGGAGAATCTGTGCTGGAACTTTCTTGAGACTGGCAGAGAAAAGAAATGCCCGGGT  
 AGTGCTAGCCACAGATCCTGATGCAGACAGACTGGCAGCAGCAGAACTCAGGAGAATGGTTGTTGGAAA  
 GTTTTACAGGGAATGAGTTGGCAGCTTTGTTGGATGGTGGATGTTGATTGCTGGAAGAAAAATAAAT  
 CAAGAAATGCTGATGTGAAGAACGTTTATATGTTAGCCACCAGTCTCTTCTAAAATCTGAAGGCAAT  
 TGCACCTAAAGAAGGATTTCAATTTGAAGAAACATTACCAGGTTTTAAATGGATTGGAAGTAGGATAATA  
 GACCTCTGGAATAAGGAAAGAGTCTTTTTGCATTTGAAGAGTCTATTGGTTTTCTCTGTGGAACCT  
 CAGTTTTGGATAAAGATGGGGTGAAGTGCAGCTGTTGTGTTGCTGAGATGGCATCTTACCTGAAACCAT  
 GAATATAACATTGAAACAGCAACTGGTTAAGGTTTATGAAAAATATGGTTATCATATTTCAAAAACCTCC  
 TATTTCTGTGTTATGAACCACCTACCATCAAAAGTATATTTGAAAGGCTTCGTAATTTTGATTCTCCAA  
 AAGAATATCCAAAATTTGTGGAACATTTGCTATATTGCATGTACGGACATTACCCTGGATATGACAG  
 TAGCCAGCCTAATAAGAAATCAGTGTGCTGTGAGTAAAAACAGCCAAATGATTACATTTACTTTTCAA  
 AATGGCTGTGTTGCTACCCTTCGACAAGCGGAACAGAACCAAGATAAAGTATTATGCAGAGATGTGTG  
 CGTCACCTGACCAGAGTGACACTGCTTTACTGGAGGAAGAACTGAAGAAACTCATTGATGCTCTGATAGA  
 GAATTTCTTCAGCCTAGTAAGAATGGACTGATCTGGCCTTCTGTT

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:**

>RC209168 protein sequence  
 Red=Cloning site Green=Tags(s)

MAENTEGDLNSNLPHPYHTGDPQLDIAIGQWLRWDKNPKTKEQIENLLRNGMKNELRDRLCCRMTFGTA  
 GLRSAMGAGFCYINDLTVIQSTQGMKYLERCFSDFKQRFVVGVDTRGQVTSSCSSQRLAKLTAAVLLA  
 KDVPVYLFVRYVPTFPVYAVQKLKAVAGVMITASHNRKEDNGYKVVYWGTAQITSPHDKEILKCIIECV  
 EPWNGSWNDNLVDTSPDKRDPLQDLCRRYMEDLKKICFYRELNSKTTLKFVHTSFHGVGHYVQLAFKVF  
 GFKPPIPVPEQKDPDPDFSTVKCPNPEEGESVLELSLRLAEKENARVVLATDPDADRLAAAELEQENGCKW  
 VFTGNELAAALFGWWMFDCWKKNSRNADYKNVYMLATTVSSKILKAIKALKEGFHFEETLPGFKWIGSRII  
 DLLENGKEVLFVFEESIIFLCGTSVLDKDGVSAAVVAEMASYLETMNITLKQQLVKVYKEYGYHISKTS  
 YFLCYEPTIKSIFERLRNFDSPKEYPKFCGTFAILHVRDITTYDSSQPNNKSVLPVSKNSQMITFTFQ  
 NGCVATLRTSGTEPKIKYYAEMCASPDQSDTALLEEELKKLIDALIENFLQPSKNGLIWRSV

**TR**TRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: [https://cdn.origene.com/chromatograms/mk6512\\_a08.zip](https://cdn.origene.com/chromatograms/mk6512_a08.zip)

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM\_173582

ORF Size: 1866 bp

OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. [More info](#)

OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

Reconstitution Method:

1. Centrifuge at 5,000xg for 5min.
2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.
3. Close the tube and incubate for 10 minutes at room temperature.
4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.
5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of shipping when stored at -20°C.

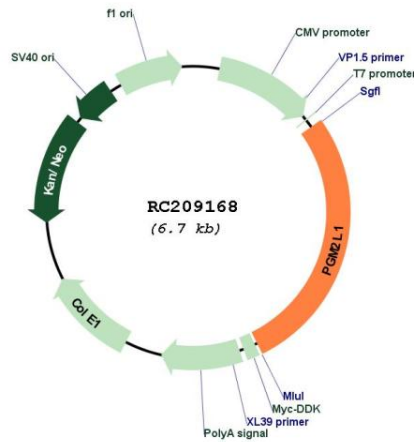
RefSeq: [NM\\_173582.6](#)

RefSeq Size: 8519 bp

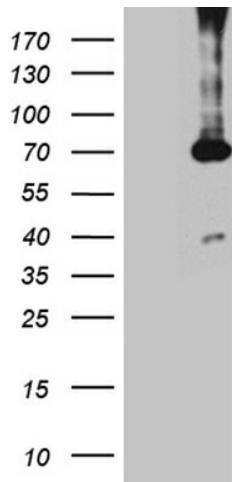
RefSeq ORF: 1869 bp

**Locus ID:** 283209  
**UniProt ID:** [Q6PCE3](#)  
**Cytogenetics:** 11q13.4  
**Protein Pathways:** Starch and sucrose metabolism  
**MW:** 70.4 kDa  
**Gene Summary:** Glucose 1,6-bisphosphate synthase using 1,3-bisphosphoglycerate as a phosphate donor and a series of 1-phosphate sugars as acceptors, including glucose 1-phosphate, mannose 1-phosphate, ribose 1-phosphate and deoxyribose 1-phosphate. 5 or 6-phosphosugars are bad substrates, with the exception of glucose 6-phosphate. Also synthesizes ribose 1,5-bisphosphate. Has only low phosphopentomutase and phosphoglucomutase activities. [UniProtKB/Swiss-Prot Function]

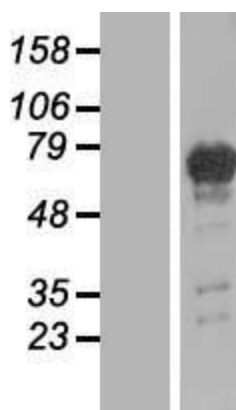
**Product images:**



Circular map for RC209168



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY PGM2L1 (Cat# RC209168, Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-PGM2L1 antibody (Cat# [TA812137]). Positive lysates [LY406489] (100ug) and [LC406489] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY406489]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC209168 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).